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**LETTER OF COMMITMENT FOR THE EU INFRATECH PROPOSAL:
BOBINE BETTERING OUR B-FIELD INFRASTRUCTURE FOR NEUTRONS IN EUROPE**

The employment of high magnetic fields and low mK temperatures provides a key tool in the investigation of strongly correlated electron phenomena with neutron-based techniques. As such, the magnets developed within the project BOBINE represent a unique opportunity to strengthen the European large-scale research infrastructures. With a joint European 20T static magnet and a 40T pulsed magnet, both combined with a bespoke mK dilution insert BOBINE will significantly extend the available parameter range towards more extreme sample environments. The project will bring unique opportunities for the exploration of (quantum) disordered systems or exotic electronic ordering phenomena, especially in combination with the latest generation of neutron scattering instruments. BOBINE will be a key development towards the discovery of exciting new physics. Moreover, the technology employed in BOBINE, based on high-temperature superconductors, will serve as a prototype for future high performance magnets, with potential use also beyond neutron scattering applications such as quantum computing.

We believe that the BOBINE project provides a very interesting and promising contribution towards a stronger and more competitive European neutron research landscape. We, at the Institut Laue Langevin, foresee a strong request from our user community to have access to such a magnetic field and temperature range to address scientific challenges mainly from, but not limited to, the area of information technology and quantum phenomena. We strongly support the BOBINE project and are committed to contributing to the project by providing the infrastructure to conduct the project and the operation of the systems on the neutron scattering beamlines at our facility.

We furthermore are happy to allocate beamtime at our facility for hot commissioning of the magnets in pilot experiments.

With kind regards,

Ken Andersen



Director